DOCUMENT RESUME

ED 418 152 TM 028 250

AUTHOR	Boe, Erling E.
TITLE	The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations To Inform Broad Education Policy. Working Paper Series.
INSTITUTION	Pennsylvania Univ., Philadelphia. Graduate School of Education.
SPONS AGENCY	National Center for Education Statistics (ED), Washington, DC.
REPORT NO	NCES-WP-96-06
PUB DATE	1996-03-00
NOTE	47p.
AVAILABLE FROM	U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics, 555 New Jersey Avenue, N.W., Room 400, Washington, DC 20208-5652.
PUB TYPE	Reports - Evaluative (142)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Data Collection; *Educational Policy; Elementary Secondary Education; Evaluation Utilization; National Surveys; *Policy Formation; Questionnaires; *Research Design; Research Methodology
IDENTIFIERS	*Schools and Staffing Survey (NCES); Teacher Followup Survey (NCES)

ABSTRACT

The Schools and Staffing Survey (SASS) and the Teacher Followup Survey (TFS) have been administered by the National Center for Education Statistics (NCES) in 1987-88, 1990-92, and 1993-95. The SASS is a large-scale survey of educational institutions in the United States. The TFS is conducted the year following the SASS to obtain more information about teachers at the sampled schools. In preparation for the next round of the SASS, the NCES decided to reassess the design of the NCES. This paper reconsiders the goals, foci, and strategies of SASS and continuing and new questionnaire content. A particular concern is the data NCES should collect to inform the educational issues most likely to be of concern in the next 10 to 20 years. The brief answer is that the NCES should continue to collect the data relevant to the fundamental dimensions of public schooling and the dimensions of the teaching force that have been considered in the past. To be prepared for the next decade, the NCES should collect data to quantify the baseline status of schools and their staffs so that changes in issues of interest can be recognized easily. In the past, SASS data have been especially useful for problem definition, evaluation of policies and programs, and also for enlightenment. and for enlightenment. In the future, it is recommended that questionnaires be designed to continue to collect useful data for these purposes and in addition to collect data more useful for evaluation of policies and programs. The following sections are included in the report: (1) "Introduction"; (2) "School Improvement versus School Change"; (3) "The Goals, Foci, and Strategy of SASS: A Reconsideration"; (4) "Dimensions of Schooling Amenable to Policy Intervention"; (5) "Review of Prior SASS Questionnaires"; (6) "Discussion and Recommendations"; and (7) "Summary." (Contains 2 tables and 14 references.) (SLD)

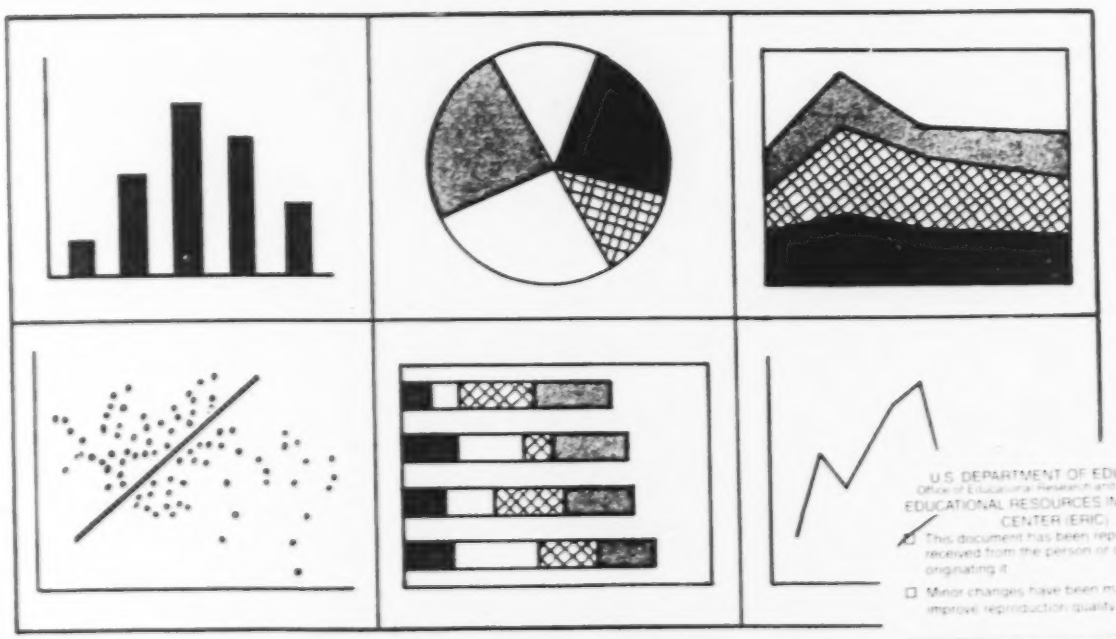
ED 418 152

NATIONAL CENTER FOR EDUCATION STATISTICS

Working Paper Series

The Schools and Staffing Survey (SASS) for 1998-99:
Design Recommendations to Inform
Broad Education Policy

Working Paper No. 96-06 March 1996



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The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations to Inform Broad Education Policy

Working Paper No. 96-06 March 1996

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March 1996

Foreword

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The ***Working Paper Series*** was created in order to preserve the information contained in these documents and to promote the sharing of valuable work experience and knowledge. However, these documents were prepared under different formats and did not undergo vigorous NCES publication review and editing prior to their inclusion in the series. Consequently, we encourage users of the series to consult the individual authors for citations.

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The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations to Inform Broad Education Policy

1998-99 Schools and Staffing Survey Seminar Series:
Forecasting the Need for Education Data in the Twenty-First Century

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March 1996

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I. INTRODUCTION

The Schools and Staffing Survey (SASS) and the Teacher Followup Survey (TFS), a longitudinal component of SASS given in the subsequent year, have been administered by the National Center for Education Statistics (NCES), the U.S. Department of Education, during three different time periods: 1987-89, 1990-92, and 1993-95.[1] Though NCES has made incremental improvements in SASS[2] between administrations and supplemented the basic SASS with additional questionnaires addressing special topics such as Indian education and library issues, there has been intentionally a great deal of continuity in the content of the several SASS questionnaires to permit the study of trends over the six-year period of SASS.

In preparation for the next administration of SASS/TFS scheduled for 1998-2000, NCES has decided to reassess the design of SASS, including questionnaire content and related matters such as the possible linking of SASS to other NCES surveys which collect student background and achievement data. This reassessment is subject to the constraints that (a) SASS will continue to be a cross-sectional survey based on national probability samples, (b) the focus of SASS will continue to be on schools, including their staffing, at the elementary and secondary levels, and (c) changes to the content of SASS should not increase the burden on respondents completing SASS questionnaires (i.e., any new content will have to be counterbalanced by selective deletions of old content).

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[1]This paper assumes that the reader is familiar with background information about SASS. In brief, SASS is a large-scale cross-sectional survey with different questionnaires being administered to independent national probability samples of local education agencies (LEAs), schools, principals, and teachers in the public sector (variations of the questionnaires for schools, principals, and teachers were administered in private and Indian schools). In the public sector, schools are sampled first, and teachers are sampled within the schools. In addition, the principals for the sampled schools and the LEAs in which the schools are nested are included. Thus, responses to the several questionnaires can be linked. During the year following a SASS administration, TFS is administered to three subsamples of teachers as follows: (a) teachers who continued to teach in the same school as in the SASS year, (b) teachers who transferred to a different school in year after SASS, and (c) teachers to left the teaching profession at the end of the SASS year. Descriptive information about SASS and TFS is available from NCES.

[2]Throughout this paper, references to SASS alone imply SASS and TFS.

As a contribution to NCES's current reassessment of the design of SASS, this paper will consider future questionnaire content in broad scope with respect to how the Survey can best inform education policy issues pertaining to schools and their staffing--especially important issues that may emerge over the next two decades. Specifically, the objectives of this paper are to:

1. Reconsider the goals, foci, and strategy of SASS, taking into account the original framework established in the mid-1980s and SASS's potential to inform broad education policy in the future.
2. Identify potential new areas of questionnaire content related to schooling that are likely to be of importance to education policy issues in the future.
3. Review the content of the most recent (i.e., 1993-94) SASS questionnaires in light of (a) the existing balance between teacher supply and demand content and other school content, (b) the extent of coverage of particular topics that appears to be excessive or the coverage of topics that appears to be of relatively low priority, and (c) redundancy across questionnaires. An outcome of this review will be the determination of questionnaire content that can be compressed or deleted to accommodate expansion in other content areas.
4. Recommend priorities among potential new content areas and essential areas from past SASS administrations that might be included in the 1998-99 administrations of SASS. The focus will be on factors determining the nature and quality of schooling that are amenable to education policy interventions, as distinguished from aspects of the broader social, economic, and political contexts which also shape the form and functions of education within society.

Two caveats involved in the pursuit of these four objectives should be noted. First, the emphasis will be on schools in the public sector because policy formation in education applies predominantly to public schools. Second, data collected by SASS should be relevant to education policy assessment and decisions at any level, because the mix of federal, state, and local influences on schooling has been in gradual flux and is expected to continue to change.

II. SCHOOL IMPROVEMENT VERSUS SCHOOL CHANGE

In preparation for the fourth administration of SASS in 1998-99, NCES is now reconsidering the value of continuing to emphasize teacher supply and demand data in contrast with other data that may contribute more toward school improvement. Specifically, NCES asked, in commissioning this paper, "What nationally-representative schools and school process data will inform our thinking about and work toward improving schools in the next 10 to 20 years" (emphasis added). Given this task, possible changes in the goals, foci, and strategy of SASS will be considered in light of their potential contribution to improving schools.

If the value of SASS is to be measured by its contributions to school improvement, it is necessary to define what is meant by school improvement. To begin, distinctions must be made among (a) changes in policies that are designed to improve schools, (b) changes in programs and practices that are designed to improve schools, and (c) changes in school performance reflected in indicators such as outcome measures (e.g., higher achievement test scores), resource efficiency measures, school climate measures, and approval ratings by stakeholders (e.g., parents, the public). Ordinarily,

- Changes in policy are expected to result in changes in programs and practices that conform to the new or revised policies and, in turn,
- Changes in programs and practices are expected to result in improved school performance.

It is well known, however, that (a) changes in policies (ordinarily construed as, and intended to be, improvements) do not necessarily result in changes in programs and practices, and (b) changes in programs or practices (often construed as, and intended to be, improvements) do not necessarily result in improved indicators of school performance. Therefore, the intent of policy makers and educators to improve policies, programs, and practices by implementing changes is not certain to reap the desired effects on school performance. Whether such changes actually affect school performance is an empirical matter, subject to systematic measurement such as by standardized achievement tests.

Furthermore, there is even a problem in determining what actions or conditions constitute "school improvement" because this involves judgment. What some regard as an improved policy, program, or practice, others may view as a reversal. For example, some view private school vouchers as a promising policy reform, while others regard them as a basic threat to public schools (Jennings & Stark, 1995). In contrast, there is often consensus about what changes in school performance represent improvement, such as rising academic achievement scores. Even so, judgements differ about whether some changes in school performance represent improvement--as evidenced by the conflict in several states over outcomes-based education.

The upshot of this line of thinking is that it will be more useful and productive to translate the concept of "school improvement" to that of "school change," and to determine whether changes in policies, programs, and practices actually lead to changes in school performance. Let others (policy makers, professional educators, the press, and the public) debate whether changes observed actually represent improvement. In contrast, SASS should be used to make major contributions to understanding various changes in the interlocking sequence of policies, programs, practices, and performances by establishing baseline status data and monitoring changes from these baselines over time.[3] Specifically, SASS can be used to:

- Monitor Changes in Policy. With respect to policy changes, SASS has not monitored the status of, or changes in, federal and state education policy. However, SASS has and can continue to monitor the status of, and changes in, policies at the local education agency (LEA) level through the Teacher Demand and Shortage Questionnaire. One value of monitoring the status of, and changes in, LEA policies is to determine how policies at the federal and state levels are being interpreted and translated into local policy. Another value of monitoring LEA policies is to determine how well programs and practices at the school level conform to LEA policies.

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[3]In fact, baseline status data may often be of more value in informing broad education policy than data on changes from baseline. Therefore, when this paper discusses changes in school policy, programs, practices, and performance, it should be understood that establishing baseline status data is a necessary and integral part of measuring change.

- Monitor Changes in Programs and Practices. SASS has and can continue to monitor the status of, and changes in, programs and practices at the LEA and school levels through the Teacher Demand and Shortage Questionnaire and the School Questionnaires. One value of monitoring the status of, and changes in, programs and practices is to determine how well they are conforming to federal, state, and local policies. Another value of monitoring the status of, and changes in, programs and practices is to measure many of the dimensions of schooling which impact on school performances.
- Monitor Changes in Performance Indicators. SASS has and can continue to monitor the baseline levels of several indicators of school performance, and changes from these baselines, through the School, Principal, and Teacher Questionnaires.[4] Though most school performance indicators are measured by instruments other than SASS, SASS nonetheless serves a special role in monitoring some school performance indicators (such as school climate) because SASS is the most direct, and possibly only, source of such national data available.

Change in school policies, programs, practices, and performances is used here as a generic concept to include school improvement, reform, and restructuring, since all such initiatives entail various forms of change. Clearly, it is not possible to predict many of the school improvement, reform, or restructuring initiatives that will continue, or be initiated, in the coming two decades. Who could have predicted in 1983 the variety and form of such initiatives that were taken in the decade following publication of A Nation at Risk? Thus, it will not be prudent to redesign SASS to monitor specific current reforms per se (such as systemic reform). Instead, SASS should monitor the fundamental dimensions of schooling that are amenable to manipulation by public policy for the purpose of improving school performance.

Considering that SASS is an instrument for collecting basic data on schooling and is scheduled to be administered only every five years in the foreseeable future, it should be

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[4]The major examples are school attendance and completion items in the School Questionnaires, and school climate in the Principal and Teacher Questionnaires.

designed to cover essential, enduring aspects of schooling that will be of continuing importance, as distinguished from covering specific reforms or current narrow issues. For example, if SASS monitored the character of, implementation of, and changes in curriculum frameworks, student assessment, and teacher preparation (both pre- and inservice), it would be monitoring fundamental dimensions of schooling that, as a group, are basic components of systemic reform. In the event that systemic reform, as such, proves to be a passing fad within a few years, SASS will nonetheless have tracked three fundamental dimensions of schooling that are likely to be relevant to future educational policy.

As noted previously, policy-based changes in such dimensions might be viewed by some as constructive reforms, and as reversals by others. Therefore, as a public agency dedicated to collecting and reporting unbiased statistical information, NCES should not appear to be an advocate for or against any reform. Furthermore, the publication of major reports of information based on SASS data usually requires four years from the time of questionnaire design--all the more reason for SASS to concentrate on fundamental dimensions of schooling that will be of enduring interest instead of concentrating on any current high-profile reform initiative.

III. THE GOALS, FOCI, AND STRATEGY OF SASS: A RECONSIDERATION

Past SASS Goals, Foci, and Strategy

Since its inception in 1987-88, the goals, foci, and strategy of SASS can be characterized as follows:

- Goals: The primary goal of SASS has been to provide data "that will contribute to the development of sound educational policies at all levels of government" (NCES, 1994, p.2). SASS has also served as a source of national and state data about schools and their staffing for educators and researchers.
- Foci: SASS has focused primarily on the teaching force (K through 12) and secondarily on school polices, programs, and administrators. Its distinctive strength

has been the comprehensive data collected about teacher characteristics, qualifications, and attitudes, and about teacher demand, supply, turnover, and workplace conditions. These aspects of the teaching force are referred to collectively in this paper by the expression "teacher supply and demand."

- Strategy: The strategy adopted for SASS has been to collect detailed descriptive data about schools and their staffing, as distinguished from collecting data to test specific hypotheses or to evaluate specific policies, programs, or practices. This strategy is particularly suited to the sample survey method, and is in keeping with NCES's mission to collect, analyze, and disseminate education statistics.

It is these basic attributes of SASS that should be reconsidered in its redesign, along with the implications for questionnaire content.

Future SASS Goals

The goals of SASS should continue to be the collection of data that will contribute to the development of sound education policies at all levels of government and that will be useful to educators and researchers. Changes in SASS for 1998-99 should be made in its foci and strategy, and in questionnaire content that follow from decisions about foci and strategy.

Future SASS Foci

The fundamental question in redesigning SASS is whether the current primary focus on collecting data about teacher supply and demand should be maintained or modified. Major candidates for alternative foci are instruction, school governance, and school organization. In reconsidering the foci of SASS, the following guiding principles should be observed:

- The importance of continuity in data collected in previous administrations of SASS should be recognized. In light of previous investments in establishing baseline data and changes over time in numerous dimensions fundamental to schooling, continuity

should be valued highly. Therefore, the redesign of SASS should not start with a clean slate.

- SASS data that will be of maximum value to policy makers and others in describing basic dimensions of schooling and in monitoring change over time in these dimensions should be of high priority. In deciding what educational phenomena are sufficiently important to quantify, the following guidelines can be used:
  - Select fundamental aspects of schooling that have been the subject of major policy action in the recent past, such as teacher preparation and qualifications, school accountability, decentralization of authority, deregulation, instructional technology, and the like. Such topics are likely to be of policy interest in the next decade or two.
  - Select fundamental aspects of schooling that have been the subject of recent policy analysis and debate, but only of minor policy action to date, such as contracting for school management and instruction (i.e., privatization), and vouchers for private school tuition. Some such topics are likely to attract major policy action in the future.
  - Select aspects of schooling of major public concern such as instruction in basic skills, student discipline, and school safety.
- The roles and contributions of other NCES surveys should be recognized, especially those that collect data about basic dimensions of schooling and monitor change in these dimensions. Even though certain data may be of critical importance, SASS should not ordinarily collect data that are available from other sources.

These principles for reconsidering the foci of SASS will be used later in analyzing alternative emphases that might be employed for the design of the fourth administration of SASS.

Future SASS Strategy

In keeping with NCES's mission to collect, analyze, and disseminate education statistics, the strategy adopted for SASS has been to collect detailed descriptive data about schools and their staffing. Without challenging NCES's statutory mission, however, it is useful to examine three potential uses of descriptive data in policy development. They are:

- Use of Descriptive Data for Problem Definition. Since policy is formed in response to problems (either actual or imagined), one policy-relevant function of descriptive data is to quantify phenomena objectively so that judgments can be made as to whether, and to what extent, a problem exists. In this respect, SASS data have been particularly useful in defining (i.e., quantifying) potential problems requiring policy intervention, such as teacher qualifications, turnover, and shortage (Bobbitt & McMillen, 1995; Bobbitt, Leich, Whitener, & Lynch, 1994). For example, SASS data have shown that the percentage of teaching positions that are not filled is less than one-half percent (Choy, Henke, Alt, Medrich, & Bobbitt, 1993). Thus, there does not appear to be a serious shortage of individuals available to be appointed as teachers. However, SASS data have also shown that about 6% of teachers overall do not hold full certification in their main teaching assignment. This can be taken as evidence of a significant shortage of qualified teachers. This problem can be defined even more precisely by computing this shortage percentage by main teaching assignment.
- Use of Descriptive Data for Evaluation of Policies and Programs. Without collecting evaluation research data specifically, descriptive statistical data might be used by agencies other than NCES (e.g., by policy analysts located at various governmental agencies and private organizations at all levels) to evaluate policies and programs. For example, descriptive data routinely collected on the authority vested in school councils (where such exist) could be used to assess the extent of implementation of a state-wide policy to create school councils with authority to make teacher hiring decisions.[5] In addition, SASS could collect data about the judgments of principals and teachers on the workability, utility, and acceptability of policies such as those devolving teacher hiring decisions to the school level. Data might also be collected on teacher behavior. For example, if it is decided to monitor a policy requiring a school improvement plan every other year, data might be collected from teachers about their participation in, and contributions to, such planning. Data thus collected about the

[5]The Public School Questionnaire of SASS's third round already collects information about several functions of school councils.

judgments and behavior of principals and teachers might provide insights into why some policies seem to be implemented and produce desired effects, and why others appear not to. Finally, some descriptive data relevant to school performance (e.g., school absences, as already collected by SASS's school questionnaires) are relevant to evaluating policy effects--though, as previously observed, most measures of school performance must come from sources other than SASS.

- Use of Descriptive Data for Enlightenment. Apart from having immediate and specific relevance to defining policy problems and to evaluating policy implementation, SASS has also collected much new background data about schools and staffing that is useful to policy makers and others in fostering a broad understanding of the phenomena addressed (i.e, the "enlightenment" function of research and statistical information as described by Weiss, 1977). According to Shavelson (1988), the central value of educational research findings (and presumably the systematic collection of statistics) lies in their ". . . constructing, challenging, or changing the way policymakers and practitioners think about problems" (pg. 4). For example, research on teacher turnover based on SASS data has contributed to a better general understanding of the components, complexities, and magnitude of this phenomenon (Ingersoll, Han, & Bobbitt, 1995).

SASS's current design emphasizes the problem definition and enlightenment uses of data collected, and to minimizes SASS's relevance to evaluation of policies and programs. While the problem definition and enlightenment functions of SASS data should be continued, it is recommended that NCES, in the redesign SASS, attempt to collect more data relevant to the evaluation function as well.

IV. DIMENSIONS OF SCHOOLING AMENABLE TO POLICY INTERVENTION

The identification of fundamental dimensions of schooling that are likely to become the subject of policy interventions is understood here to be equivalent to NCES's concept of "emerging educational issues." In commissioning this paper, NCES asked "What emerging educational issues are likely to be important in the coming years and how can

SASS data inform our understanding of these issues?" This section of the paper is devoted to identifying both "emerging issues" and "enduring issues" that are amenable to policy intervention. Enduring issues, as well as emerging issues, will be considered because SASS may not have addressed (or sufficiently addressed) either type. The second part of NCES's question, pertaining to "how can SASS data inform our understanding," will be addressed in a subsequent section.

As addressed in this paper, the fundamental dimensions of schooling are classified into five main categories: school governance, instruction, educational finance, school infrastructure, and school staffing (principals and teachers). Because the first three administrations of SASS emphasized school staffing, a subsequent section of this paper is devoted to consideration of this major topic. Therefore, this section of the paper concentrates on the other four categories (school governance, instruction, educational finance, and school infrastructure).

Fundamental dimensions of schooling vary in the degree to which they are amenable to policy intervention. For example, the teacher-pupil ratio is directly amenable to policy intervention, while the social character of teacher-pupil interactions is not, even though the latter may have much greater effect on academic achievement and other valued student performances. Since a primary consideration in the redesign of SASS is to inform broad education policy pertaining to schooling in the next two decades, the objective of this section is to identify those fundamental dimensions of schooling which have a reasonable prospect of <u>being taken seriously</u> in future policy formation. Such dimensions might be relevant to both current policies (possibly under reconsideration for modification or discontinuation) and to the formation of new policy.

To identify fundamental dimensions of schooling that are likely to be targets of policy formation in the next two decades, some explicit criteria are required. Such dimensions were identified here by meeting any one of the following criteria:

- Dimensions of schooling that have been the target of <u>major policy formation</u> in the past, especially the past ten years or so.

- Dimensions of schooling that have been the target of limited policy formation, but have been the target of major policy attention (as indicated by discussion, debate, attempted but failed legislative efforts to adopt policies, and policies subject to adoption on a small scale).
- Dimensions of schooling that are currently of major concern or contention to the public and/or policy makers.

A listing of dimensions deemed to be fundamental to schooling because they met one or more of the above criteria is presented in Table 1.[6] While other observers may offer different lists, there probably would be a high degree of overlap with the dimensions included here. Because the listing in Table 1 includes too many dimensions of schooling for practical inclusion in redesigned SASS questionnaires, a subset of these dimensions must be selected. To reduce this list, dimensions were selected that met all three of the following criteria:

- Dimensions of schooling that are expected to inform broad education policy (an NCES specification for this commissioned paper).
- Dimensions of schooling that can be measured feasibly by the sample survey method with strict limits on burden for respondents (e.g., it is not feasible to expect LEAs to report per pupil costs disaggregated by school functions and programs because of technical difficulties and burden).
- Dimensions of schooling that are not included in other high quality surveys (e.g., the Common Core of Data includes LEA financial data).

A listing of the subset of the dimensions meeting each of these criteria is presented in Table 2.[7] Other dimensions pertaining to teaching force are deferred to the next section. Since each of the dimensions of schooling selected for Table 2 are candidates for inclusion

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[6]Other than the dimensions of school listed in Table 1, SASS has also collected data on a variety of basic aspects of schooling such as student enrollment in LEAs and schools, staffing pattern and size, school type and level, location, etc., and should continue to do so.

[7]It is possible that data for some dimensions included in Table 2 are available from other NCES surveys and should, therefore, be deleted from this list. This can best be determined by NCES staff members who know the detailed content of all their surveys.

Table 1: Fundamental Dimensions of Public Schooling Receiving Policy Attention and/or Action***

1. School Governance/Organization
   - •Centralization/decentralization of authority
   - •Regulation/deregulation
   - •Accountability
     - Student outcomes, and public reporting
     - Competition (i.e., school choice)
       - Inter- and intradistrict choice
       - Charter schools
       - Vouchers (including private schools)
     - Performance Based Accreditation
     - School performance monetary rewards
   - •Privatization
   - •Desegregation
   - •School Safety and Discipline

2. Instruction
   - •Curriculum frameworks/standards
   - •Opportunity-to-learn standards
   - •Student performance standards
   - •Assessment of student performance
     - Standardized testing
     - Performance/authentic measurement
     - Attendance
     - Completions/drop outs
     - Discipline
   - •High school graduation standards
   - •Instructional practices
     - Basic skills vs. higher order thinking
     - Course requirements
     - Class size

2. Instruction (continued)
   - •Instructional practices (continued)
     - Time (hours and days)/scheduling
     - Tracking
     - Non-graded primary levels
     - Inclusion of special need students
   - •Instructional materials (mostly textbooks)
   - •Instructional technology (computers)
   - •Special programs
     - Disadvantaged/at risk
     - Limited English proficiency
     - Special education
     - Community service
     - Coordinated education, health, and social services
     - Substance abuse prevention
     - School-to-work transition
   - •Nontraditional public schools
     - Magnate Schools
     - Vocational education schools
     - Schools-within-a-school
     - Alternat. Schools for Special Populations
       - Exceptional/nonconforming students
       - Special needs students

3. Educational Finance
   - •Sources of school funding
   - •Per pupil cost as distributed among school functions/programs

4. School Infrastructure
   - •Building construction/rehabilitation
   - •Classrooms wired for computers/internet

***Dimensions pertaining to the teaching force are listed separately in Table 3.

Table 2: Fundamental Dimensions of Public Schooling Recommended for Inclusion in SASS, Along with Estimations of Costs of Implementing Related Education Policies

1. School Governance

   {Centralization/decentralization of authority} **
   Regulation/deregulation *N
   Privatization *R

2. School accountability

   School outcomes **
   {Public reporting of school outcomes} *N
   Competition (i.e., school choice) *R
      {Inter- and intradistrict choice}
      Charter schools
      Vouchers (for public and private schools)

3. Standards: Curriculum and Student Performance

   Curriculum frameworks/standards **
   Student performance standards **
      Associated with curriculum standards
      {High School graduation standards}

4. Assessment of student performance

   Standardized testing **
   Performance/authentic measurement **
   {Attendance} *N
   {Completions/drop outs} *N

5. Instructional practices

   Basic skills vs. higher order thinking **
   Inclusion of special need students *R

6. Instructional technology

   Computer usage and infrastructure ***

7. Special programs

   {Disadvantaged/at risk} ***
   {Limited English proficiency} ***
   {Substance abuse prevention} **

8. Nontraditional public schools

   {Magnate Schools} **
   {Alternative Schools for Special Populations} **
   {Schools-within-a-school} **

*N Policy implementation would entail only minor incremental funding by new appropriations.
*R Policy implementation would entail reallocation of existing funding, but little new funding.
** Policy implementation would require substantial incremental funding.
*** Policy implementation would require major incremental funding.
{ } Dimensions of schooling addressed by the 1993-94 SASS.

in the redesigned SASS questionnaires for 1998-99, the potential of each dimension to inform broad education policy in the next two decades will be discussed in turn.

1. School Governance

In recent years, a great deal of policy development in education has involved changes in school governance, most of which has focused on school-based management--a policy designed to transfer authority from the LEA to the school level. Since major policy interest and development on the locus of authority over various aspects of schooling are expected to continue in the future, SASS data could be very useful in tracking the status of, and changes in, authority vested in school boards, superintendents, school councils, principals and teachers.

Deregulation is another school governance topic that has been the subject of much policy discussion and formation over the past decade or so, at both the Federal and state levels. Deregulation typically is intended to liberate school personnel from stifling regulations so that they will be able to change school programs and practices in ways judged to be most responsive to local needs and circumstances. Deregulation policies have been framed in several ways, such as waivers of regulations granted upon application submitted by schools, deregulation for high performing schools, revocation of regulations by the regulating authority, and the award of charter school contracts with much less regulation than applicable to regular public schools. Since major policy interest and development in the area of school regulations is expected to continue in the future, it is important to track this phenomenon with SASS data.

Privatization of instruction and school management is the third school governance topic of importance for monitoring by SASS data. Privatization is the subject of rapidly increasing policy interest development, especially during the past year when the Republican party captured majorities in Congress and in most state legislatures. The two main forms of privatization at the present time are: contracting for the management of particular schools, and contracting with private organizations to operate and staff charter schools--intentionally designed to have full authority and little regulation. Some vocal policy

analysts and policy makers further advocate that school improvement can only be gained through radical change in the functions of LEAs, namely, that LEAs should function only as policy bodies and as contracting agencies for public schooling. Under this conception, all "public" schools would be operated by private corporations under contract with LEAs, and be subject to LEA policy and monitoring for contract compliance. Privatization, in its various forms, is an appealing option to policy makers for several reasons, one of which is that it requires little or no incremental funding. Instead, the costs of privatizing schools are largely underwritten by reallocation of existing funding for regular public schools. In view of the rapidly increasing interest in privatization of schooling, the collection of SASS data about this phenomenon could be very helpful in future policy development.

2. School Accountability

School accountability measures, programs, and systems have been the subject of much policy development during the past decade or so, and this is almost certain to be an area of much policy action in the coming decades. Though accountability policies have also been adopted for LEA's, school administrators, teachers, and students, the focus here is on accountability policies applicable specifically to public schools.

One accountability strategy favored by policy makers is the measurement of school outcomes, especially by standardized achievement tests and various approaches to performance measurement, and also dropout percentages. Achievement testing occurs at the national level (i.e., the National Assessment of Educational Progress--NAEP) and in most states. SASS could be very useful in collecting data on (a) the types and extent of outcome measurements of all kinds administered in schools, (b) the time and effort the measuring operations consume (including preparing students for testing), (c) the impact such measures have on instruction (e.g., teaching-to-the-test), and (d) the views of school personnel on the utility of various types of outcome measures for improving school performance.

Once states are committed to measuring school outcome performances, the public dissemination of such measures is a widely-used accountability policy of very low

incremental cost. It is popular with the press and the public who are very interested in school rankings, and this kind of exposure brings public pressure on principals and teachers to explain performance levels attained, and to develop and report school improvement plans. Because public reporting of school performance is so popular and costs so little, it is expected to continue to be widely mandated. SASS could collect useful data on the impact of this policy on the attitudes and behavior of school personnel. Such data would be helpful in assessing whether this accountability policy has the intended effect of evoking school improvement efforts.

Other accountability policies are designed to promote competition among public schools, and between public and private schools. These policies entail various schemes for intra- and interdistrict public school choice, charter schools, and vouchers. School competition has been an area of increasing policy ferment in recent years, is so at present, and almost certainly will be so in the future. In fact, charter school and voucher polices are perhaps the subject of the most intense policy debates at the present time. SASS can provide useful data for informing broad education policy by tracking the several facets of this phenomenon in terms of how it impacts on the functioning of schools, on the work of their staffs, and on school climate.

The competitive aspects of school choice, charter schools, and vouchers have been discussed here as accountability strategies used by policy makers. It should be recognized, however, that these strategies serve other purposes as well. One of these purposes is to provide alternatives for students whose particular needs are not being served well by instruction and other programs offered in regular classrooms. Some advocate that such students should be able to choose a type of school best suited to them. Hence, a variety of school choices is required for this purpose. In addition to competition, privatization of schooling serves a further function. As noted above under school governance, the charter school and voucher varieties of school competition are also strategies used to remove schools from the direct control of LEA's and to place them under private auspices.

3. Standards: Curriculum and Student Performance

The development of curriculum standards represents a major current policy initiative at the federal, state, and local levels, even though there has been considerable conflict over standards developed in some subject matters. Because the development of standards represents a major policy trend that lies at the center of the teaching and learning process (as distinguished from, for example, school governance), it would be worthwhile to track the types and sources of curriculum standards used in the nation's schools.

Even though the development of student performance standards trails behind the development of curriculum standards, it would also be worthwhile to track whether student performance standards are used, and, if so, their source and whether they are correlated with curriculum standards that may be in use.

Opportunity-to-learn standards are omitted here because NAEP surveys already address instructional practices in some detail.

High school graduation standards are recommended for inclusion in SASS because they have also been the target of policy attention in recent years. They represent the level of attainment expected by the time of completion of secondary school, and are relevant to school-to-work and school-to-college transitions.

4. Assessment of Student Performance

The assessment of actual student performance (as distinguished from expected standards of performance) is a major ongoing subject of policy formation and is central both to instruction and to school performance. SASS can have two important roles in tracking the assessment of student performance. One role is to survey the types of measures used for academic achievement, especially standardized and performance/authentic measurement. However, it is not expected that SASS will attempt to collect data on the results of such measures due to the burden involved and because these results are often available from state education agencies. The second role for SASS is to collect data on the level of student performance on other types of indicators (specifically

attendance and completion data) because these data are important and the burden is modest.

5. Instructional Practices

As noted above, NAEP surveys address instructional practices in some detail. Therefore, little in this category is recommended for SASS coverage except for two instructional practices that are not covered by NAEP, have been contentious with educators and parents, and have been the subject of continuing policy attention. The first of these two practices is the instructional emphasis placed on basic skills in contrast with the emphasis on higher order thinking. The second instructional practice is the inclusion of "special needs" students in regular classrooms. If SASS data are collected on these two practices, it would also be useful to survey the type and amount of instructional emphasis given to four other topics that have been of interest in the development of policy, viz. discipline, working together cooperatively, values, and computer literacy.

6. Instructional Technology

Many policy makers and others expect microcomputers in the classroom to revolutionize instruction, and continuing policy attention to this topic is expected. SASS can inform policy development in this area by collecting data about the availability in classrooms of computer hardware, networking and access to the internet, and software for instructional purposes, how and the extent to which it is used, and other important aspects of this technology (e.g., the availability in schools of skilled technicians to install and maintain this technology).

7. Special Programs

A number of special programs have been implemented in public schools to address a variety of social problems (especially those of poverty, limited English proficiency, and substance abuse) that limit student performance. These concerns are expected to continue to command the attention of policy makers, educators, and the public in coming

decades--especially since current trends suggest that such social problems are intensifying. SASS can contribute to policy development in this area by collecting data about the extent of such problems in schools, and the types and extent of school programs designed to address them.

8. Nontraditional Public Schools

Nontraditional schools (e.g., magnate schools, schools-within-schools, alternative schools, and specialized schools for students with severe disabilities) have been established in response to a variety of social and human concerns such as desegregation, school dropouts, alienation, and learning and physical handicaps. Since the concerns to which these schools respond will continue in the decades to come (and may even intensify), SASS data would be useful in informing policy review and development in this area.

The strategy to break up very large (and, therefore, impersonal) schools into smaller schools (i.e., schools-within-a-school) is an instance of a larger strategy designed to improve schools. Data that are routinely collected by SASS on school size and type are useful for tracking changes in these dimensions.

V. REVIEW OF PRIOR SASS QUESTIONNAIRES

Improvements in, and changes to, the contents of SASS questionnaires have been made by NCES for the 1990-91 and 1993-92 administrations. There was substantial deletion of content from the 1990-91 survey and addition of new content for the 1993-94 survey. Many of the items deleted from the 1990-91 survey pertained to teacher supply and demand. Some of these changes also involved the deletion of items from the school questionnaires that duplicated similar items from the teacher questionnaires. Nonetheless, in commissioning this paper, NCES asked, "Is the existing balance between supply and demand issues and other school topics still appropriate?" The review of SASS questionnaires presented here will yield an answer to this question about priorities.

As in the past, NCES can easily justify making incremental improvements in, and changes to, SASS. That is not the issue. The issue is whether the content of SASS

questionnaires for 1998-99 should represent a drastic change from the past--a change characterized by major reductions in content pertaining primarily to teacher supply and demand (but also to principal supply and demand), and the addition of new content about other dimensions of schooling that would better inform broad education policy.

The argument for changing SASS drastically is that the first three rounds have yielded substantial data about the teaching force and additional data are unnecessary. Also, that by continuing to emphasize teacher variables, an opportunity is lost to collect data about aspects of schooling that will be of importance to future policy development on a wide range of other issues.

On the other hand, an argument can be made to maintain SASS in its 1993-94 form. Past decisions to emphasize collection of data about teachers and principals were astute and justified because staffing is the central factor in determining the quality and improvement of schooling. This view is buttressed by the results of a recent large-scale meta-analysis of education production functions which found that "resource variables that attempt to describe the quality of the teachers (teacher ability, teacher education, and teacher experience) show very strong relations with student achievement" (Laine, Greenwald, & Hedges, 1995, pp. 57-58). It can further be argued that, since the three past SASS administrations have yielded a large amount of data basic to understanding the dynamics of the teaching force (including trends over time), it is vital that continuity in data collection be maintained about this most important component of the quality and character of schooling.

In response to the genuine tension between the strategies of "drastic change versus continuity" in redesigning SASS for 1998-99, this paper takes a middle position. While a considerable amount of the content of the 1993-94 SASS questionnaires can be compressed or deleted to accommodate expansion in other content, the first priority is to maintain continuity in data collection basic to understanding the attributes and flows of the teaching force. The basic data collection to be maintained for this purpose is presented in Table 3.

Table 3: Fundamental Dimensions of the Teaching Force Addressed by SASS Questionnaires

1. Teacher demand
2. Sources of supply
3. Teacher shortage
4. Teacher demographic characteristics
5. Teacher qualifications
    - •Teacher preparation
        - Preservice
        - Professional development
    - •Certifications
    - •Experience
6. Teaching assignment and load
7. Employment and working conditions
8. Collective bargaining/union membership
9. Turnover
    - •Among schools
    - •Among teaching fields
    - •Between sectors
    - •Attrition
10. Compensation
    - •Level of compensation
    - •Minimum compensation
    - •Special monetary incentives
    - •Salary setting principles
        - Salary schedules
        - Merit pay
        - Career ladder
    - •Employee benefits

Although it is widely recognized that teacher quality is perhaps the most critical educational determinant of student achievement (Kennedy, 1992; Mandel, 1995; Laine, Greenwald, & Hedges, 1995), teacher quality is a broad concept that includes (a) teacher qualifications, (b) classroom teaching performance, and (c) teacher ability such as measured by tests. The sample survey method is very useful for collecting data on teacher qualifications, and SASS should continue to have a strong emphasis on collecting such data as it has in the past. SASS is not a suitable vehicle for collecting data on the quality of classroom teaching performance, even under simulated conditions. Although teaching performance is the prime facet of teacher quality, a promising research approach to investigating this topic (as distinguished from collecting survey data) has been recommended elsewhere (Mandel, 1995).

As to teacher tested ability, NCES should study (if it has not already done so) the feasibility of either (a) collecting tested ability scores for teachers in the SASS sample, or

(b) linking SASS to other data bases where such scores might be recorded. Even tested ability scores for a subsample of the SASS sample of teachers would be useful.

Teacher qualifications are also directly relevant to the dimension of teacher shortage, as listed in Table 3. Information derived from SASS data demonstrates that there is practically no shortage of the numbers of individuals that are willing and able to accept teaching positions (Choy, et al., 1993). Instead, other research has shown that there is a shortage of qualified teachers, and an even greater shortage of high quality teachers (Boe & Gilford, 1992; Gilford & Tenenbaum, 1990). Therefore, the continued collection of extensive data on teacher qualifications by SASS will be vital to measuring the level of, and trends in, the shortage of qualified teachers.

As in past administrations of SASS, it is recommended that data pertaining to dimensions of the teaching force listed in Table 3 should continue to be collected through the teacher demand and shortage, school, and teacher questionnaires. However, the breadth of coverage of these dimensions should be reduced to a reasonable minimum. Some specific suggestions for minimizing the breadth of coverage of some of these dimensions are made below. One general recommendation is to eliminate all redundant item content that may still exist between questionnaires and within questionnaires.[8]

With respect to the remaining content of SASS questionnaires for 1993-94 (i.e., other than content relevant to the dimensions of the teaching force identified in Table 3), much should be condensed or deleted to accommodate new content in 1998-99 that will better inform broad education policy. The following guidelines will be helpful in deciding what content to retain, condense, or delete:

- Content basic to understanding the characteristics, qualifications, responsibilities and authority, leadership style, and compensation of school principals should be retained, but be reduced in depth of coverage.

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[8]It is recognized that most or all of such redundancies were eliminated in the 1993-94 SASS.

- Content should be retained that has the potential to inform broad education policy in the coming two decades, while content that does not should be minimized. The topics listed in Tables 2 and 3 suggest what this content should be.
- Content should be minimized that is, or will be, available from other high-quality surveys.
- Content should be minimized that has shown a stable pattern over the first three SASS administrations if it is likely to remain stable or can be predicted with reasonable accuracy.
- Content should be minimized that has generated little policy or research interest in the past, unless there is reason to believe that it will become useful to emerging policy issues.
- Content should be minimized that is based on questionnaire items of marginal technical quality (unless efforts to improve the items are successful).

Based on the general considerations discussed above for redesigning SASS questionnaires, specific observations and suggestions are made below relating to the content of each of the four main SASS questionnaires used in 1993-94.

Teacher Demand and Shortage Questionnaire

The Teacher Demand and Shortage Questionnaire is the only source of some teacher data and should continue to be collected from LEAs. Items such as district teacher counts, hiring criteria, and collective bargaining agreements should be retained. In contrast, items pertaining to teacher type, certification, supply, turnover, ethnicity, and retirement benefits are candidates for deletion, because such information is included in the Public School Teacher Questionnaire. Much of the other content of the Teacher Demand and Shortage Questionnaire addresses the dimensions of schooling listed in Table 2, and are, therefore, candidates for retention.

Principal Questionnaires

Though collection of data on the education and experience of principals is important and should continue, it would seem that assigning two-thirds of the content of the questionnaire to these two topics is excessive, and, therefore, should be condensed. While the item pertaining to school problems may continue to be important, it is doubtful that the same item should continue to be included in both the principal and teacher questionnaires. The content on locus of influence is relevant to governance policies promoting decentralization. Collection of data on this general topic should continue, but consideration might be given to casting it in terms of decision-making authority.

School Questionnaires

Much of the content devoted to the teaching force in the first two administrations of the school questionnaires was eliminated for the third administration in 1993-94. As last designed, the content of the school questionnaires was focused on basic descriptive information about school characteristics, staffing, programs, and policies. Much of this is essential to describing schools, and much is relevant to educational policy issues. Therefore, it would probably not be prudent to delete or compress much of this material.

Teacher Questionnaires

The content of the teacher questionnaires needs to be trimmed to permit the inclusion of expanded content relevant to education policies in areas other than the teaching force. Some suggestions are: (a) compress the content on teacher experience (especially breaks in service and experience prior to beginning teaching), (b) eliminate content on changes in teaching assignment (as data on year-to-year changes are available from the TFS), (c) compress the content on teaching load, and (d) compress or eliminate much of the content on teacher perceptions and attitudes (depending upon the extent to which previous analyses have demonstrated stability in data pertaining to these topics, and the extent to which these data have proven to be interesting or useful to policy makers and others). While these and other changes might be made to data collected from teachers, it is

important to continue to collect sufficient data to monitor all the dimensions of the teaching force listed in Table 3.

Teacher Followup Survey

As a longitudinal component of SASS, the TFS has served an indispensable role in monitoring year-to-year flows of teachers included in the prior SASS sample. As a vehicle for tracking actual teacher career transitions (as distinguished from teacher reports of activities in the prior year, and plans for the coming year), TFS is the definitive means for collecting data on teacher turnover and variables associated with teacher turnover. Therefore, TFS should be retained in much the same form as in the past.

Linking SASS with Student Data

Because data collected by SASS provides critical national and state level information about schools and their staffing that is unavailable from others sources, SASS most definitely should be continued in its present general form. Yet, a major limitation of SASS is that it does not include student achievement data that can be analyzed in relation to school, teacher, and principal variables. Fortunately, NCES is exploring the possibility of linking SASS to student data collected by other surveys such as NAEP and the National Eduction Longitudinal Survey of 1988 (NELS:88). The advantages of doing so are obvious if the important role served by SASS in NCES's current array of surveys is not greatly diluted or sacrificed. If such radical changes in SASS were required to link it with student data that much of its current value to the field would be lost, then other solutions should be sought (e.g., expanding or otherwise changing the teacher and school/school administrator questionnaires of NAEP and NELS:88).

VI. DISCUSSION AND RECOMMENDATIONS

Feasibility of Expanding SASS Content

To recapitulate, it is recommended that future data collection by SASS be prioritized as follows:

1. Include fundamental dimensions of the teaching force as listed in Table 3, with emphasis on teacher qualifications.

2. Include basic attributes of school principals, LEAs, and schools.

3. Include fundamental dimensions of schooling that are expected to be active areas of policy development in the next two decades, as listed in Table 2.

This is to be accomplished without increasing the burden on SASS respondents.

In contemplating the feasibility of adopting these recommendations, it should be recognized that the four SASS questionnaires used in 1993-94 already addressed a substantial majority of the dimensions recommended here. The only new topics recommended for inclusion in the next SASS are some of the dimensions of schooling listed in Table 2. As can be seen in this table, the 1993-94 SASS collected data pertaining to half of the dimensions listed. SASS has also collected data on all the teacher, principal, and school variables recommended above for continued coverage in the 1998-99 SASS. To offset the burden created by adding new content, other recommendations were made about compressing or deleting content from the four SASS questionnaires used in 1993-94 (see section V).

It, therefore, seems feasible to consider redesigning SASS in accordance with the recommendations offered in this paper. The fact, however, that past SASS questionnaire content included half the dimensions of schooling listed in Table 2 does not imply that their coverage was adequate (either in form or breadth) for future purposes. Therefore, it may be necessary to establish further priorities for selecting among the specific dimensions of schooling recommended in Table 2 for future data collection, as addressed in the next section.

Data Collection Priorities for Dimensions of Schooling

As noted above, a number of the dimensions of schooling listed in Table 2 represent new content areas recommended for data collection by SASS because of their potential relevance to future policy development. If it were not feasible to collect SASS data about all these dimensions, then the subset selected should include the dimensions which are likely to be the most active areas of policy debate and development. The best candidates

for areas of most intense policy development are school governance and accountability--just as they have been in the recent past. It is, therefore, worth examining why policy makers have attended so extensively to aspects of school governance and accountability.

A primary reason for the attention given by policy makers to these two facets of schooling is related to the "means" available to policy makers to influence the educational process. The second main reason relates to the cost of implementing policies. Specifically, policy makers can use several means to implement polices adopted.[9]

- They can structure the governance context by:
  - Allocating decision-making authority (such as in school-based management).
  - Adopting or revoking mandates (i.e., in the forms of statutes and regulations) (such as deregulation).
  - Designating public or private sector for operations (such as in privatization).
- They can establish accountability policies, with performance incentives, designed to:
  - Measure and report school performance (such as achievement test scores).
  - Promote competition among schools (through school choice, charter schools, vouchers).
  - Link rewards and sanctions to school performance (such as offering monetary rewards).
- They can appropriate funds by:
  - Making direct allocation of funds for programs, and to build capacity in terms of human, equipment, or infrastructure resources (such as computer acquisitions).
  - Creating financial incentives to evoke desired responses (such as school improvements).

Through structuring the governance context of schools, policy makers can control the governance environment in which schools operate by (a) assigning decision making authority along the continuum from centralization to decentralization (the main levels of the continuum being Federal, state, LEA, and school), (b) adopting or revoking statutes

[9]The following outline is based in part on the identification of policy instruments by McDonnell and Elmore (1987).

and regulations (both as to the content and the general extent of control of schooling), and (c) designating the functions of schooling that will be performed by agencies in the public and private sectors (such as privatizing the management of public schools). As indicated in Table 2, only minor or moderate incremental funding is required to implement policies in the governance areas. Furthermore, policy decisions about school governance can often be translated into action much more quickly than can changes in instruction. Consider, for example, the relative ease with which regulations can be repealed in comparison with implementing curriculum standards in the classroom. These characteristics of school governance policies help explain why they have been so prevalent in recent years, and why they are expected to be a major area of policy development in the coming decade or two. A high priority should be placed by NCES on collecting SASS data about school governance arrangements in the interest of informing broad education policy.

Policy makers also influence schooling by establishing accountability procedures and systems applicable to LEAs, schools, teachers, administrators, and students. Such policies are popular with the press and with the public because they are taken as evidence of engagement, oversight, and control by responsible authorities. As indicated in Table 2, a remarkable variety of school accountability strategies are available to policy makers and many of these have been used widely (Boe, Boruch, Landau, & Richardson, 1993), while only minor or moderate incremental funding is required to implement them. In addition, such policies can often be implemented quickly and easily since they do not require the collaboration of school personnel. These circumstances explain why the development of accountability policies has been so prevalent in the past decade or so, and why it is reasonable to expect that this will continue to be a very active area of policy development in the future. It is, therefore, recommended that NCES place high priority on collecting data about various forms of school accountability.

The appropriation of funds to improve schooling is, of course, a means also used extensively by policy makers. As noted above, one of the main advantages of developing policies of the school governance and accountability types is that they generally do not require substantial funds for implementation. However, the appropriation of substantial or

major funds is usually required to implement policies intended to improve instruction such as curriculum and performance standards, educational technology, and special programs such as for at-risk students (see items 3 through 8 of Table 2). At this time of retrenchment in government spending, tight finances alone represent a major impediment to rapid progress in improving instruction.

With respect to adopting policies intended to improve instruction, several factors other than funding limitations also pose serious difficulties to implementing such policies. For example, efforts to implement curriculum, opportunity-to-learn, and performance standards have become embroiled in controversy over the proper role of federal and state policy in this area. Policies addressing other instructional issues (such as authentic assessment, inclusion of special needs students in regular classrooms, programs for limited English proficient students, and so on) are also very controversial. In addition, implementation of policies intended to improve instruction usually involve (a) changes in the work of principals, teachers, and students, and (b) changes in school programs and practices--both time-consuming processes. For all these reasons, progress in improving instruction is likely to be slow and uneven--even though central to improving teaching and learning. Regardless, it can be expected that policy makers will continue to devote considerable attention to instructional issues in the coming decades, and SASS date can be very helpful in informing broad education policy in this area as well.

The considerations discussed above suggest that policy development in the areas of school governance and accountability will be particularly active (and implementation of such policies will be feasible) during the next two decades, while policy development in the area of instruction will continue to be fraught with great difficulty. Therefore, if priorities need to be established for SASS data collection among these three areas, it is recommended that priority should be accorded to school governance and accountability in the interests of informing policy deliberations.

Evaluation Function of SASS Data

To enhance the value of SASS data for policy development, it has been recommended above that SASS questionnaires be designed to collect more data that is useful in evaluating policies, programs, and practices. While NCES should maintain a neutral posture with respect to the import of such data to policy issues, it seems feasible for NCES to collect and report descriptive statistical data of this type. In fact, such data were collected in the 1993-94 SASS, as illustrated by an item in the teacher questionnaires which sought teachers' opinions about the impact and value of professional development programs in which they had recently participated. However, an item of this type represents only one of four types of descriptive data that could be very useful for assessing policies and programs. The several types of data relevant to evaluation that might be collected through SASS are:

1. Data on policies adopted. Data on whether an LEA has adopted a policy locally can be useful in evaluating the acceptability or feasibility of a policy originating at a higher level. For example, a state may promote (say, through financial inducements and provision of technical assistance) the voluntary adoption of school-based management by LEAs. The incidence of adoption of the new policy would be relevant to assessing the strategy used by the state to promote this policy.
2. Data on policies implemented as programs or practices. In those instances where an LEA has adopted a policy, data on whether it has been implemented at the school level in the form of a program or practice also can be useful in evaluating the acceptability or feasibility of a policy. If a policy has not been implemented, further data can be collected on barriers to policy implementation; if a policy has been implemented as a program or practice, further data can be collected that describe the program or practice, and any unexpected side effects. Such information can be useful for assessing whether the program or practice embodies the basic intent of the policy. For example, information could be collected about school level efforts to implement a school-based management and the specific form taken by this management arrangement.

3. Data on judgments by principals and teachers. In those instances where a policy has been implemented at the school level, the judgments of principals and teachers can be collected about the workability, utility, and acceptability of the new programs or practices that result from implementing the policy. For example, the judgements of principals and teachers on various aspects of a school-based management system implemented in their school could be useful in assessing the merits and liabilities of delegating operational authority to the school level.
4. Data on behavior of principals and teachers. In those instances where a policy has been implemented at the school level, reports by principals and teachers could be collected about changes in their behaviors that have occurred as a result of implementing a policy. For example, the work of principals is expected to be changed substantially by the introduction of school-based management. If the workload has shifted, for example, from 50% instructional support and 10% financial management (plus other functions), to 10% instructional support and 50% financial management, such information would be useful to policy makers and others to assess the policy impact on the culture of schools.

The discussion above demonstrates that descriptive statistical data such as collected by SASS could be very useful in assessing, refining, and developing education policy. Therefore, the evaluation function of SASS data should be enhanced.

VII. SUMMARY

The final question posed by NCES in commissioning this paper was "What are the likely concerns of the next 10-20 years, and what data should we collect now to inform those issues in the next decade?" The short answer to the first part of this question is that SASS should collect data relevant to the fundamental dimensions of public schooling listed in Table 2 and the dimensions of the teaching force listed in Table 3, for reasons previously discussed. If it is not feasible to collect data on all the dimensions listed in Table 2, then it is recommended that the priorities for expanding SASS questionnaire

content should include the various dimensions of school governance and accountability listed in Table 2, rather than all the dimensions relating to improvement of instruction.

The guidelines that were used in this paper to select the dimensions listed in Tables 2 and 3 were:

- Select fundamental dimensions of schooling, especially of public schools.
- Emphasize the selection of dimensions amenable to policy intervention at all levels.
- Emphasize the selection of dimensions pertaining to the teaching force because of the central role of teachers in the quality and improvement of schooling, and in the interest of continuity with past SASS administrations.
- Emphasize the selection of dimensions of schooling that have the greatest potential to be policy issues during the next two decades.
- Include dimensions of major concern to stakeholders.
- Exclude dimensions for which nationally-representative data are collected in other high-quality surveys.
- Exclude dimensions that are inappropriate for questionnaire surveys.
- Exclude dimensions that pose unacceptable burden on respondents.

After, thus, having selected the sets of dimensions listed in Tables 2 and 3 for inclusion in SASS questionnaires, the second part of NCES's question can be addressed, viz. "what data should we collect now to inform those issues in the next decade?" In summary, it was recommended that:

- Data should be collected to quantify the baseline status of schools and their staffs with respect to the dimensions selected for inclusion in SASS questionnaires.
- Once baseline status is established, subsequent administrations of SASS should monitor possible changes from baseline status in the dimensions of interest.
- The collection of data on both baseline status and changes from baseline should be designed so that the data are useful to inform education policy development. The value of such data for policy development will be maximized if the data are:
  - Useful for problem definition,
  - Useful for evaluation of policies and programs, and
  - Useful for enlightenment.

In the past, SASS data have been especially useful for problem definition and for enlightenment. In the future, it is recommended that questionnaires be designed to continue to collect useful data for these purposes, and, in addition, be designed to collect data more useful for evaluation of policies and programs.

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Listing of NCES Working Papers to Date

Number	Title	Contact
94-01	Schools and Staffing Survey (SASS) Papers Presented at Meetings of the American Statistical Association	Dan Kasprzyk
94-02	Generalized Variance Estimate for Schools and Staffing Survey (SASS)	Dan Kasprzyk
94-03	1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report	Dan Kasprzyk
94-04	The Accuracy of Teachers' Self-reports on their Postsecondary Education: Teacher Transcript Study, Schools and Staffing Survey	Dan Kasprzyk
94-05	Cost-of-Education Differentials Across the States	William Fowler
94-06	Six Papers on Teachers from the 1990-91 SASS and Other Related Surveys	Dan Kasprzyk
94-07	Data Comparability and Public Policy: New Interest in Public Library Data Papers Presented at Meetings of the American Statistical Association	Carrol Kindel
95-01	Schools and Staffing Survey: 1994 papers presented at the 1994 Meeting of the American Statistical Association	Dan Kasprzyk
95-02	QED Estimates of the 1990-91 Schools and Staffing Survey: Deriving and Comparing QED School Estimates with CCD Estimates	Dan Kasprzyk
95-03	Schools and Staffing Survey: 1990-91 SASS Cross-Questionnaire Analysis	Dan Kasprzyk

Listing of NCES Working Papers to Date (Continued)

Number	Title	Contact
95-04	National Education Longitudinal Study of 1988: Second Follow-up Questionnaire Content Areas and Research Issues	Jeffrey Owings
95-05	National Education Longitudinal Study of 1988: Conducting Trend Analyses of NLS-72, HS&B, and NELS:88 Seniors	Jeffrey Owings
95-06	National Education Longitudinal Study of 1988: Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data	Jeffrey Owings
95-07	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings
95-08	CCD Adjustments to the 1990-91 SASS: A Comparison of Estimates	Dan Kasprzyk
95-09	The Results of the 1993 Teacher List Validation Study (TLVS)	Dan Kasprzyk
95-10	The Results of the 1991-92 Teacher Follow-up Survey (TFS) Reinterview and Extensive Reconciliation	Dan Kasprzyk
95-11	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
95-12	Rural Education Data User's Guide	Samuel Peng

Listing of NCES Working Papers to Date (Continued)

Number	Title	Contact
95-13	Assessing Students with Disabilities and Limited English Proficiency	James Houser
95-14	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
95-15	Classroom Instructional Processes: A Review of Existing Measurement Approaches and Their Applicability for the Teacher Follow-up Survey	Sharon Bobbitt
95-16	Intersurvey Consistency in NCES Private School Surveys	Steven Kaufman
95-17	Estimates of Expenditures for Private K-12 Schools	Steve Broughman
95-18	An Agenda for Research on Teachers and Schools: Revisiting NCES' Schools and Staffing Survey	Dan Kasprzyk
96-01	Methodological Issues in the Study of Teachers' Careers: Critical Features of a Truly Longitudinal Study	Dan Kasprzyk
96-02	Schools and Staffing Survey (SASS): 1995 Selected papers presented at the 1995 Meeting of the American Statistical Association	Dan Kasprzyk
96-03	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
96-04	Census Mapping Project/School District Data Book	Tai Phan

Listing of NCES Working Papers to Date (Continued)

Number	Title	Contact
96-05	Cognitive Research on the Teacher Listing Form for the Schools and Staffing Survey	Dan Kasprzyk
96-06	The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations to Inform Broad Education Policy	Dan Kasprzyk

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